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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. | |
|---|-----------------------|----------------------|-------------------------|------------------|--|
| 09/852,304 | 05/10/2001 | Chan Kim | 11349-P66638US0 4724 | | |
| 43569 75 | 43569 7590 07/11/2005 | | | EXAMINER | |
| MAYER, BROWN, ROWE & MAW LLP | | | MURPHY, RHONDA L | | |
| 1909 K STREET, N.W. WASHINGTON, DC 20006 | | | ART UNIT | PAPER NUMBER | |
| | | | 2667 | | |
| | | | DATE MAILED: 07/11/2005 | | |

Please find below and/or attached an Office communication concerning this application or proceeding.

| | Application No. | Applicant(s) | | | |
|---|--|---|--|--|--|
| Office Action Summers | 09/852,304 | KIM ET AL. | | | |
| Office Action Summary | Examiner | Art Unit | | | |
| | Rhonda Murphy | 2667 | | | |
| The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply | | | | | |
| A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION. - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication. - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely. - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication. - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b). | | | | | |
| Status | | | | | |
| 1) Responsive to communication(s) filed on <u>01 March 2005</u> . | | | | | |
| 2a) ☐ This action is FINAL . 2b) ☑ This | This action is FINAL . 2b)⊠ This action is non-final. | | | | |
| 3) Since this application is in condition for allowance except for formal matters, prosecution as to the ments is | | | | | |
| closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213. | | | | | |
| Disposition of Claims | | | | | |
| 4) ⊠ Claim(s) <u>1-9</u> is/are pending in the application. 4a) Of the above claim(s) is/are withdraw 5) □ Claim(s) is/are allowed. 6) ⊠ Claim(s) <u>1 and 2</u> is/are rejected. 7) ⊠ Claim(s) <u>3-9</u> is/are objected to. 8) □ Claim(s) are subject to restriction and/or | | | | | |
| Application Papers | | | | | |
| 9) The specification is objected to by the Examiner 10) The drawing(s) filed on 01 March 2005 is/are: a Applicant may not request that any objection to the d Replacement drawing sheet(s) including the correction 11) The oath or declaration is objected to by the Examiner | n)⊠ accepted or b)□ objected to drawing(s) be held in abeyance. See on is required if the drawing(s) is obje | 37 CFR 1.85(a). ected to. See 37 CFR 1.121(d). | | | |
| Priority under 35 U.S.C. § 119 | | | | | |
| 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some * c) None of: 1. Certified copies of the priority documents have been received. 2. Certified copies of the priority documents have been received in Application No 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received. | | | | | |
| Attachment(s) | | | | | |
| 1) Notice of References Cited (PTO-892) 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date S Patent and Trademark Office | 4) Interview Summary (in Paper No(s)/Mail Date 5) Notice of Informal Pate 6) Other: | e | | | |

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DETAILED ACTION

Response to Amendment

1. This communication is responsive to the amendment filed on March 1, 2005. Accordingly, claims 1-9 are currently pending in this application.

Claim Objections

1. Claim 1 is objected to because of the following informalities:

Claim 1, line 6, the term "external" should be described in more detail.

Appropriate correction is required.

Claim Rejections - 35 USC § 103

- 2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 3. Claims 1 and 2 are rejected under 35 U.S.C. 103(a) as being unpatentable over Karasawa (US 6,665,315).

Regarding claim 1, Karasawa teaches a cell receiving means (Fig. 3, receiving unit 20) for receiving an ATM cell from the PON downstream data (col. 4, lines 49-51) and transferring an ATM cell through a receiving interfacing means to external (col. 4, lines 49-63) and transferring a message in a PLOAM (Physical Layer Operation and Maintenance) cell to a message processing means (col. 4, lines 55-59); a cell

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transmitting means (Fig. 3, transmitting unit 28) for transmitting the ATM cell received through a transmitting UTOPIA interfacing means in a granted slot (col. 3, lines 66-67; col. 4, lines 1-10; granting slots for ATM cell transmission is known in the art) and transferring in upstream by loading the message being on standby in payload of the PLOAM cell when the PLOAM cell is transmitted (col. 5, lines 20-29); and a message processing means (Fig. 3, message analysis unit 24) for setting internal signals by processing the received message or instructing operation of a plurality of functional blocks (col. 5, lines 5-8; "reads and analyzes the messages... sets the delay value in the delaying unit 27"), and transferring the message requested by the plurality of functional blocks through the cell transmitting means (see Fig. 3, the path from delaying unit 27 to transmitting unit 28).

Karasawa fails to explicitly disclose a receiving utopia interfacing means.

However, utopia interfacing means in ATM systems are well known in the art for testing and operation purposes.

Therefore, it would have been obvious to one skilled in the art to include a utopia interfacing means in order to perform tests and operation functions, thus providing a more reliable system.

4. Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over Karasawa as applied to claim 1 above, and further in view of Yuki (US 6,778,557).

Regarding claim 2, Karasawa teaches a cell transmitting means.

Karasawa fails to teach a cell transmitting means using an arbitrary MAC (Medium Access Control) technique by outputting an enable signal for mini-slot payload.

However Yuki teaches using an arbitrary MAC (Medium Access Control) technique by enabling arbitrary data loaded in a mini-slot and outputting an enable signal for mini-slot payload and receiving a byte input signal (col. 27, lines 5-25).

In view of this, it would have been obvious to one skilled in the art to modify Karasawa's system, by enabling data loaded in a mini-slot to output an enable signal, so as to improve communications efficiency and reduce buffer memory requirements (col. 29, lines 31-33).

Allowable Subject Matter

5. Claims 3 – 9 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Response to Arguments

6. Applicant's arguments with respect to claims 1 and 2 have been considered and are most in view of the new ground(s) of rejection.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Rhonda Murphy whose telephone number is (571) 272-3185. The examiner can normally be reached on Monday - Friday 8:00 - 4:30pm.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chi Pham can be reached on (571) 272-3179. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Rhonda Murphy Examiner Art Unit 2667

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CHI PHAM

SUPERVISORY PATENT EXAMINE

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